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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/511,795   | 02/23/2000  | Richard Schunk       | 37069/JEC/X2        | 3884             |
| 35114  | 7590        | 11/03/2003           | EXAMINER            |                  |
| ALCATEL INTERNETWORKING SYSTEM, INC.<br>ALCATEL-INTELLECTUAL PROPERTY DEPARTMENT<br>3400 W. PLANO PARKWAY, MS LEGL2<br>PLANO, TX 75075 |             |                      | LEVITAN, DMITRY     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2662                |                  |

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                 |               |
|------------------------------|-----------------|---------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s)  |
|                              | 09/511,795      | SCHUNK ET AL. |
|                              | Examiner        | Art Unit      |
|                              | Dmitry Levitan  | 2662          |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) 21-23 is/are objected to.

8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.

4)  Interview Summary (PTO-413) Paper No(s) \_\_\_\_.

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. Claims 1, 2, 4-9, 11-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yin (US 5,982,748) in view of Cheung (US 6,515,964).
2. Regarding claims 1, 8, 14 and 15, Yin substantially teaches an apparatus and a method for a multi service network switch (Fig. 1 and col. 2 lines 45-46, col. 4 lines 31-34) comprising: Receiving an incoming connection request (connection request on Fig. 1 and col. 4 lines 37-40); Assigning (CAC 10 on Fig. 1 and col. 4 lines 34-43) an access level (service class on Tables 1 and 2, col. 1 lines 39-55) to the incoming connection request; Identifying (CAC) the resource requested by the incoming connection request (steps 36, 42, 48 on Fig. 2 and col. 5 lines 16-18, 26-27, 33-34); Determining an amount of current usage for the identified resource (rate monitor 16 on Fig. 1 and col. 4 lines 56-67, steps 38,44,50 on Fig. 2 col. 5 lines 37-44); and Allocating (CAC) the identified resource (variable A(i) on Fig. 4 and col. 6 lines 43-65) to the incoming connection request (step 82 on Fig. 4 and col. 8 lines 39-41) if the amount of current usage is less than the access threshold associated with the assigned access level (step 76 on Fig. 4 and col. 8 lines 32-39, col. 6 lines 8-35).

Yin does not teach maintaining in a data store of the network switch an access level for a characteristic associated with a connection request, the access level being associated with an access threshold, determining the characteristic of the incoming connection request, retrieving

the access level for the determined characteristic from a data store and assigning the retrieved access to the incoming connection request.

Cheung teaches maintaining in a data store (memory 200 on id Fig. 3 and 6:14-48) of the network switch (gateway 100 on id Fig. 2 and 5:28-65) an access level (call quality requirement id 4:59-63) for a characteristic associated with a connection request (id 6:54-64), the access level being associated with an access threshold (maximum delay bound id 6:56-64), determining the characteristic of the incoming connection request (call quality requirements determined step 520 on id Fig. 5 and 8:58-60), retrieving (id 5:1-7) the access level for the determined characteristic from a data store and assigning the retrieved access to the incoming connection request (id 2:41-49).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add method of Cheung to the system of Yin to increase the amount of quality characteristics in the system.

Yin and Cheung do not teach an access level of three or more access tiers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to add three access tiers to the method of Yin and Cheung as a design choice, because two tiers or five tiers will work in the system as well.

In addition regarding claim 14, Yin teaches interface lines for receiving an incoming connection request (Connection request 12 on Fig. 1 and col. 4 lines 34-35),

A memory storing a plurality of access levels (database 15 on Fig. 1 and col. 4 lines 40-48), and  
A processor coupled to the memory to execute program instructions (Connection Admission  
Control 10 on Fig. 1 and col. 4 lines 34-48).

Regarding claims 4, 11 and 18, Yin teaches a method and apparatus wherein the  
characteristic of the incoming call is a type of inlink carrying the incoming connection request  
(col. 1 lines 26-38).

Regarding claims 6, 12 and 20, Yin teaches a method and apparatus wherein the  
characteristic of the incoming call is a type of user submitting the connection request (constant  
data, voice. Video col. 1 lines 39-55).

Regarding claims 7 and 13, Yin teaches a method and apparatus comprising  
communicating a request for the identified resource, the communicated request including the  
identified quality of access level (CBR, ABR, UBR on Fig. 1 and col. 1 lines 39-55);  
Communicating a response indicating that the identified resource is available (col. 2 lines 26-29)  
and communicating a request to allocate the identified resource (col. 2 lines 29-41).

3. Regarding claims 2, 9 and 16, Yin and Cheung substantially teach all the limitations of  
parent claims 1, 8, 14 including terminating a connection and reallocating the resource  
previously allocated to the terminated connection ( Yin col. 4 lines 43-48).

Yin and Cheung do not teach terminating an existing connection based on its access level.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add termination a low priority connection (UBR col. 1 lines 52-55) to the system of Yin and Cheung to improve the system utilization of network resources.

4. Regarding claims 5 and 19, Yin and Cheung substantially teach all the limitations of parent claims 1, 14 including storing information regarding existing connections ( Yin col. 4 lines 40-45) and updating it.

Yin and Cheung do not teach associating a connection request with a phone number.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use of phone numbers to identify existing and new connections in the system of Yin and Cheung to improve the system utilization of network resources.

5. Claims 3, 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yin and Cheung in further view of Hardwick (US 5,550,816).

Yin and Cheung substantially teach all the limitations of parent claims 1, 2, 8, 9 and 14 including allocating bandwidth to different service classes and monitoring it.

Yin and Cheung do not teach plurality of virtual routers as different service classes.

Hardwick teaches plurality of virtual routers as different service classes (closed user groups col. 5 lines 47-65 and col. 15 lines 17-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add plurality of virtual routers of Hardwick to the system of Yin and Cheung to improve the system utilization of network resources.

***Allowable Subject Matter***

Claims 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is 703-305-4384. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.



Dmitry Levitan  
Patent Examiner  
10/28/03.



HASSAN KIZOU  
SUPERVISORY PATENT EXAMINER  
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